- (b) the name of the organizer of Indian Science Congress and what arrangement Government had made for the security, etc. for the scientists;
- (c) whether it is also a fact that several scientists and security men had fallen ill there due to contaminated food; and
 - (d) if so, the people which were found responsible for this?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) Yes, Sir. The 94th Indian Science Congress was organized at Chidambaram in Tamil Nadu.

- (b) The 94th Indian Science Congress was organized by the Indian Science Congress Association, Kolkata at Annamalai University, Annamalainagar-608002, Chidambaram. The security arrangements were made by the SPG of Government of India in Coordination with Tamil Nadu State Police personnel (which included DGP, IG, DIGSPs. DSPs and their contingents).
 - (c) No, Sir.
 - (d) Does not arise.

Shortage of scientists in research and development institutions

- 680. SHRI JANARDHANA POOJARY: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:
- (a) whether there is acute shortage of scientists in research institutes in the country;
 - (b) if so, the details thereof;
- (c) whether owning to poor salaries, perks and early retirement age in Government scientific institutes, a number of young and promising scientists are opting for private and overseas assignments; and
- (d) if so, the details thereof and the steps proposed to be taken by Government to arrest attrition and attract promising talents into the country's R & D institutes?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) to (c) No Sir. The mobility of scientists from the research

institutes to private and overseas assignmen and is triggered by various factors including better financial and career prospects. However, considering our goal and ambitions, country as a whole requires a larger number of scientists for its transformation into a developed nation by the year 2020.

(d) Government has framed policies and various schemes to provide better facilities and opportunities to the scientists and to encourage young students in schools and colleges to pursue science in the country. The various measures taken from time to time are:

Policies:

- Science and Technology Policy, 2003.
- Increase in the outlay for science and technology sector in successive
- Five Year Plans.
- Delegation of enhanced administrative and financial powers to S&T institutions to improve working conditions of scientists.

School centric programmes to attract school children:

- Children Science Congress.
- · U-PROBE (introducing meteorology in schools).
- · National Science Olympiad Programme.
- · Kishore Vaigyanik Protsahan Yojana (KVPY).
- · CSIR Programme on Youth for Leadership in Science (CPYLS).

Programmes targeted towards young scientists:

- · Swarnajayanti Fellowships.
- Fast Track Scheme for Young Scientists.
- SERC Visiting Fellowships.
- SERC Schools in emerging areas of science and technology.
- Better Opportunities for Young Scientists in Chosen Areas of Science and Technology (BOYSCAST) fellowship to visit international laboratories and institutions.
- Mission HOPE (Higher Education Opportunities for Promoting Enterpeneurship) with the aim of converting aspirations to real enterprises (CARE).

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- Contact programmes to attract and motivate brilliant young scientists to take up R & D as a career.
- Junior/Senior research fellowships, research associateships and senior research associateships.
- Diamand Jubilee Research Interns Award Scheme, JRF-GATE and Entrepreneurship support to research scholars.
- Early Faculty Induction Programme, which aims at attracting bright and young under-gradute students in Engineering and Technology/ Pharmacy/Architecture, etc. to take teaching as their career.
- S & T based training for entrepreneurial development.
- Women Scientists Scheme.

Progarmmes targeted towards performing scientists:

- The Ramanujan Fellowships.
- The JC Bose National Fellowships.
- The Ramanna Fellowships.
- Shyama Prasad Mukherjee Fellowships.
- SERC Individual Projects.
- Financial assistance to scientists to participate in international conferences and training programmes.
- Opportunities to distinguished scientists and technologists of Indian origin settled abroad for short term technical assignments to assist in frontier and emerging areas of S & T.
- · Post-doctoral Fellowships in Biotechnology and Life Sciences.
- · Infrastructure development programmes:
- Intensification of Research in High Priority Areas (IRHPA).
- Fund for Improvement of S & T Infrastructure in Higher Educational Institutions (FIST).
- Setting up of centres of excellence/advanced studies in the universitites and academic institutions.

- Creation of core groups of professional with necessary modern facilities required for pursuing research in new and frontier areas of science.
- Creation of new scientific Departments/Organisations.

Science and technology cooperation on biotechnology

- 681. SHRJ B. J. PANDA: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:
- (a) whether India and ASEAN propose to boost science and technology cooperation with a thrust on biotechnology, etc.;
- (b) if so, the details thereof, indicating the broad benefits that accrue to the country out of this; and
- (c) whether this help will make Tsunami Early Warning System more effective, to control loss of life and property in the country?

THE MINISTER OF SCIENCE AND TECHNOLOGY (SHRI KAPIL SIBAL): (a) to (c) An ASEAN-INDIA Working Group on Science and Technology has been set up under the aegis of Indo-ASEAN with a view to promote S & T cooperation. Specific areas identified for such cooperation include Advanced Materials, Bio-technology, Information Technology, Space Science and Technology, Technology Management and Science and Technology Popularization. During 1990-2000, R & D projects in agriculture biotechnology were implemented. Presently the cooperation activities are limited to exploratory missions, joint research projects, research attachment, joint workshops and training in identified areas.

Policy inputs by CFTRI on food processing

- 682. DR. K. MALAISAMY: Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:
- (a) the major policy inputs given by Central Food Technology Research Institute (CFTRI) regarding food, quality, safety, nutrition and processing on the one side and the effect and impact of such policies;
- (b) the details of linkages with international organisations and the contribution obtained by such linkages; and